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10/072,188	02/07/2002	David G. Allen	17757 (MHM 13428US01)	3771

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EXAMINER

CHOI, JACOB Y

ART UNIT

PAPER NUMBER

2875

DATE MAILED: 03/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/072,188

Applicant(s)

ALLEN ET AL.

Examiner

Jacob Y Choi

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02/07/2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 355, 135, 190, & 282. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to because reference character numbers are hard to read. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 3, 9, 10, & 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spiller (USPN 6,036,333).

Regarding claim 1, Spiller discloses a housing (20) configured to be connected to a liquid supply (figures 1-3), the housing having an inlet port (23) and a discharge port (101) arranged at opposite ends of the housing and having a linear passageway extending along a straight path entirely through the housing from the inlet port to the discharge port (figures 1-3), the linear passageway being configured to convey liquid from the inlet port to the discharge port, a power generator located near the linear passageway (40) and configured to convert energy from liquid flowing through the linear passageway into electric power (44), and a light source (50) mounted on the housing and driven by the power generator. Spiller discloses the claimed invention except for the power generator located in the linear passageway. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the location of the generator of Spiller to linear passageway of the housing, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding claim 2, Spiller discloses the claimed invention, explained above. In addition, Spiller disclose the inlet and discharge ports and the linear passageway are centered about a common axis, the linear passageway having a uniform constant diameter along an entire length thereof (22).

Regarding claim 3, Spiller discloses the claimed invention, explained above. In addition, Spiller discloses the linear passageway is tubularly shaped and centered about a linear longitudinal axis extending along a center of the housing.

Regarding claim 9, Spiller discloses the claimed invention, explained above. In addition, Spiller discloses a nozzle (25) pivotally attached to one of the inlet and discharge ports.

Regarding claim 10, Spiller discloses the claimed invention, explained above. In addition, Spiller discloses an impeller (42, 43) being configured to be rotatably driven by liquid flowing through the linear passageway.

Regarding claim 11, Spiller discloses the claimed invention, explained above. In addition, Spiller discloses fins (42, 43) mounted to the housing and suspending the power generator in a center of the linear passageway.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Spiller (USPN 6,036,333) in view of Lin et al. (USPN 6,439,472).

Regarding claim 4, Spiller discloses the claimed invention except for a light ring mounted to one end of the housing and surrounding one of the inlet and discharge ports. Lin et al. teaches that it is known to modify the sprayer device with a light ring member mounted to one end of the housing for general illumination purpose. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use modification in Spiller, as taught by Lin et al. in order to illuminate one end of the housing of the water faucet or sprayer device for the general illumination purpose.

5. Claims 5, 6, 7, 8, 16, 17, 18, 19, 20, 21, & 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spiller (USPN 6,036,333) in view of either Lin et al. (USPN 6,439,472) or Bernhard (USPN 6,502,976).

Regarding claim 5, Spiller discloses the claimed invention except for the light source includes at least one of a light emitting diode. Either Lin et al. or Bernhard teaches that it is known to modify the conventional light bulb with LED(s). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify utilization of a conventional light bulb of Spiller to LED light source(s) of either Lin et al. or Bernhard, since the examiner takes Official Notice of the equivalence of LED and conventional light bulb for their use in the general illumination and the selection of any of these known equivalents to illuminate the one end of the housing would be within the level of ordinary skill in the art.

Regarding claim 6, Spiller discloses the claimed invention except for the light source includes a plurality of light emitting diodes arranged in a concentric circle about one of the inlet and discharge ports. Either Lin et al. or Bernhard teaches that it is known to modify the conventional light bulb with LED(s). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify utilization of a conventional light bulb of Spiller to LED light source(s) of either Lin et al. or Bernhard, since the examiner takes Official Notice of the equivalence of LED and conventional light bulb for their use in the general illumination and the selection of any of these known equivalents to illuminate the one end of the housing would be within the level of ordinary skill in the art. In addition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize plurality of LED(s) as an illumination source, since it has been held that mere duplication of the essential

working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Regarding claim 7, Spiller discloses the claimed invention except for the ring shaped bracket mounted to one end of the housing, the ring shaped bracket defining a circumferential chamber, and a printed circuit board mounted in the circumferential chamber and connected to the light source, the printed circuit board being arranged concentric with the linear passageway. Lin et al. teaches that it is known to modify the conventional light bulb with LED(s) where the ring shaped bracket mounted to one end of the housing, the ring shaped bracket defining a circumferential chamber, and a printed circuit board mounted in the circumferential chamber and connected to the light source, the printed circuit board being arranged concentric with the linear passageway. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify utilization of a conventional light bulb of Spiller to LED light source(s) of Lin et al., since the examiner takes Official Notice of the equivalence of LED and conventional light bulb for their use in the general illumination and the selection of any of these known equivalents to illuminate the one end of the housing would be within the level of ordinary skill in the art.

Regarding claim 8, Spiller discloses the claimed invention except for the light source includes light emitting diodes arranged in a circle concentric with the linear passageway. Either Lin et al. or Bernhard teaches that it is known to modify the conventional light bulb with LED(s). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify utilization of a conventional

light bulb of Spiller to LED light source(s) of either Lin et al. or Bernhard, since the examiner takes Official Notice of the equivalence of LED and conventional light bulb for their use in the general illumination and the selection of any of these known equivalents to illuminate the one end of the housing would be within the level of ordinary skill in the art.

Regarding claim 16, Spiller discloses a housing configured to be connected to a liquid supply, the housing having an inlet port and a discharge port arranged at opposite ends thereof and having a passageway interconnecting the inlet and discharge ports, the housing being aligned along a longitudinal axis, a power generator located near the passageway and configured to convert liquid flowing through the passageway into electric power. Spiller discloses the claimed invention except for the power generator located in the linear passageway. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the location of the generator of Spiller to linear passageway of the housing, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Spiller discloses the claimed invention except for a plurality of light emitting diodes arranged in a ring concentrically about one of the inlet and discharge ports. Either Lin et al. or Bernhard teaches that it is known to modify the conventional light bulb with LED(s). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify utilization of a conventional light bulb of Spiller to LED light source(s) of either Lin et al. or Bernhard, since the examiner takes Official Notice of the equivalence of LED and conventional light bulb for their use in the



general illumination and the selection of any of these known equivalents to illuminate the one end of the housing would be within the level of ordinary skill in the art.

In addition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize plurality of LED(s) as an illumination source, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Regarding claim 17, Spiller (USPN 6,036,333) in view of either Lin et al. (USPN 6,439,472) or Bernhard (USPN 6,502,976) discloses the claimed invention, explained above. In addition, Lin et al. discloses a circular bracket mounted to one end of the housing, the circular bracket defining a chamber extending about a circumference of, and arranged concentric with one of the inlet and discharge ports, and a printed circuit board located in the chamber and operatively connected to the light emitting diodes.

Regarding claim 18, Spiller (USPN 6,036,333) in view of either Lin et al. (USPN 6,439,472) or Bernhard (USPN 6,502,976) discloses the claimed invention, explained above. In addition, Lin et al. discloses a printed circuit board hermetically sealed within the housing, the printed circuit board being electrically connected to the light emitted diodes.

Regarding claim 19, Spiller (USPN 6,036,333) in view of either Lin et al. (USPN 6,439,472) or Bernhard (USPN 6,502,976) discloses the claimed invention, explained above. In addition, Lin et al. discloses a ring shaped printed circuit board hermetically sealed within the housing, the printed circuit board having the light emitted diodes mounted thereto and electrically communicating with the power generator.

Regarding claim 20, Spiller (USPN 6,036,333) in view of either Lin et al. (USPN 6,439,472) or Bernhard (USPN 6,502,976) discloses the claimed invention, explained above. In addition, either Spiller or Lin et al. or Bernhard discloses the passageway is linear to define a straight path extending entirely through the housing from the inlet port to the discharge port, the passageway being configured to convey liquid from the inlet to the discharge port.

Regarding claim 21, Spiller (USPN 6,036,333) in view of either Lin et al. (USPN 6,439,472) or Bernhard (USPN 6,502,976) discloses the claimed invention, explained above. In addition, either Spiller or Lin et al. or Bernhard discloses the inlet and discharge ports and the passageway are centered about a common linear axis extending entirely through the housing.

Regarding claim 22, Spiller (USPN 6,036,333) in view of either Lin et al. (USPN 6,439,472) or Bernhard (USPN 6,502,976) discloses the claimed invention, explained above. In addition, either Spiller or Lin et al. or Bernhard discloses the passageway is tubularly shaped with a uniform diameter centered about a longitudinal axis extending entirely through the housing.

6. Claims 12-15, 23, 28, 29, & 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spiller (USPN 6,036,333) in view of either Portyrata (USPN 3,845,291) or Anderson (USPN 5,793,130) or Anderson (USPN 5,982,059) or Bolson (USPN 4,564,889) or Bolson (USPN 4,616,298) or Ingalz (USPN 4,936,508).

Regarding claims 12, 14, & 15, Spiller discloses the claimed invention, except for the power generator includes magnets and a coil centered about a fluid axis of the

linear passageway, the magnets being adapted to be rotated about the fluid axis in response to fluid flow through the linear passageway, the power generator further including angled tabs having one end extending along an end of the coil and having an opposite end extending along a side of at least one of the coil and the magnets, the angled tabs electro-magnetically coupling the magnets to the coil. Either Portyrata or Anderson(s) or Bolson(s) or Ingatz teaches that it is known to modify the location of the power generator so that the magnets and a coil are centered about a fluid axis of the linear passageway the angled tabs having one end extending along an end of the coil and having an opposite end extending along a side of at least one of the coil and the magnets. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the location of the generator of Spiller to linear passageway of the housing, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. In addition, applicant has not disclosed that the specified location solves any additional stated problem other than problems solved by either Portyrata or Anderson(s) or Bolson(s) or Ingatz or is for any particular purpose and it appears that the invention would perform equally well with the power generator's magnets and a coil centered about a fluid axis of the linear passageway of the house.

Regarding claim 13, Spiller discloses the claimed invention, except for the linear passageway extends through an interior of the generator. Either Portyrata or Anderson or Bolson or Ingatz teaches that it is known to modify the location of the power generator. It would have been obvious to one having ordinary skill in the art at the time

the invention was made to modify the location of the generator of Spiller to linear passageway of the housing, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. In addition, applicant has not disclosed that the specified location solves any additional stated problem other than problems solved by either Portyrata or Anderson or Bolson or Ingatz or is for any particular purpose and it appears that the invention would perform equally well with the power generator being located the linear passageway of the housing.

Regarding claims 23, 28, 29, & 30, Spiller discloses a housing configured to be connected to a water supply, housing having an inlet port and a discharge port arranged at opposite ends thereof, the housing having a linear passageway extending along a straight path entirely through the housing from the inlet port to the discharge port, the linear passageway being configured to convey water from the inlet port to the discharge port, a power generator mounted in the linear passageway and configured to convert energy from water flowing through the linear passageway into electric power, the generator, and an electric output from the power generator delivering electrical power to a low power electrical component operatively connected to the power generator. Spiller discloses claimed invention, except for the power generator includes magnets and a coil centered about a fluid axis of the linear passageway, the magnets being adapted to be rotated about the fluid axis in response to fluid flow through the linear passageway, the power generator further including angled tabs having one end extending along an end of the coil and having an opposite end extending along a side of at least one of the coil and the magnets, the angled tabs electro-magnetically coupling the magnets to the coil.

Either Portyrata or Anderson(s) or Bolson(s) or Ingatz teaches that it is known to modify the location of the power generator so that the magnets and a coil are centered about a fluid axis of the linear passageway the angled tabs having one end extending along an end of the coil and having an opposite end extending along a side of at least one of the coil and the magnets. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the location of the generator of Spiller to linear passageway of the housing, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. In addition, applicant has not disclosed that the specified location solves any additional stated problem other than problems solved by either Portyrata or Anderson(s) or Bolson(s) or Ingatz or is for any particular purpose and it appears that the invention would perform equally well with the power generator's magnets and a coil centered about a fluid axis of the linear passageway of the house.

7. Claims 24, 25, 26, & 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spiller (USPN 6,036,333) in view of either Portyrata (USPN 3,845,291) or Anderson (USPN 5,793,130) or Anderson (USPN 5,982,059) or Bolson (USPN 4,564,889) or Bolson (USPN 4,616,298) or Ingatz (USPN 4,936,508). as applied to claim 23 above, and further in view of either Lin et al. (USPN 6,439,472) or Bernhard (USPN 6,502,976).

Regarding claim 24, Spiller in view of either Portyrata or Anderson(s) or Bolson(s) or Ingatz discloses the claimed invention, except for the electrical component includes light emitting diodes arranged in a circle concentric with the linear passageway.

Either Lin et al. or Bernhard teaches that it is known to modify the conventional light bulb with LED(s). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify utilization of a conventional light bulb of Spiller to LED light source(s) of either Lin et al. or Bernhard, since the examiner takes Official Notice of the equivalence of LED and conventional light bulb for their use in the general illumination and the selection of any of these known equivalents to illuminate the one end of the housing would be within the level of ordinary skill in the art. In addition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize plurality of LED(s) as an illumination source, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Regarding claim 25, Spiller in view of either Portyrata or Anderson(s) or Bolson(s) or Ingatz discloses the claimed invention, except for a light ring mounted to one end of the housing an surrounding one of the inlet and discharge ports, the light ring including a plurality of light emitted diodes powered by the power generator. Either Lin et al. or Bernhard teaches that it is known to modify the conventional light bulb with LED(s) where the electrical component includes light emitting diodes arranged in a circle concentric with the linear passageway. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify utilization of a conventional light bulb of Spiller to LED light source(s) of either Lin et al. or Bernhard, since the examiner takes Official Notice of the equivalence of LED and conventional light bulb for their use in the general illumination and the selection of any of these

known equivalents to illuminate the one end of the housing would be within the level of ordinary skill in the art.

Regarding claim 26, Spiller in view of either Portyrata or Anderson(s) or Bolson(s) or Ingatz discloses the claimed invention, except for a plurality of light emitting diodes arranged in a ring about one of the inlet and discharge ports. Either Lin et al. or Bernhard teaches that it is known to modify the sprayer device with a light ring member mounted to one end of the housing for general illumination purpose. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use modification in Spiller, as taught by Lin et al. in order to illuminate one end of the housing of the water faucet or sprayer device for the general illumination purpose.

Regarding claim 27, Spiller in view of either Portyrata or Anderson(s) or Bolson(s) or Ingatz discloses the claimed invention, except for a ring shaped printed circuit board mounted in the housing and arranged concentrically with the linear passageway, the printed circuit board being configured to support electrical components driven by the power generator. Either Lin et al. or Bernhard teaches that it is known to modify a ring shaped printed circuit board mounted in the housing and arranged concentrically with the linear passageway, the printed circuit board being configured to support electrical components driven by the power generator. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify utilization of a conventional light bulb of Spiller to LED light source(s) of either Lin et al. or Bernhard, since the examiner takes Official Notice of the equivalence of LED and conventional light bulb for their use in the general illumination and the

selection of any of these known equivalents to illuminate the one end of the housing would be within the level of ordinary skill in the art.

**Conclusion**

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Katzman (USPN 5,140,254) – shower accessory

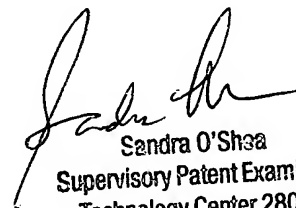
Sheeks (USPN 3,913,399) – rate-of-flow meter with attached generator

Lerner et al. (USPN 4,731,545) – portable self-container power conversion unit

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Y Choi whose telephone number is (703) 308-4792. The examiner can normally be reached on Monday-Friday (10:00-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (703) 305-4939. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-7724.

  
Sandra O'Shea  
Supervisory Patent Examiner  
Technology Center 2800



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